
Some Consideration of the Term Combination

A paper read October 1, 1914, before the Examining
Corps of the United States Patent Office

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WASHINGTON, D. C.
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The purpose of this paper is to present an inquiry into the use of the term Combination as it is applied in Patent Law to different agroupments or assemblages of parts or elements; to endeavor some consideration of the different agroupments to which the term Combination is applied, and to suggest certain applications of the term to each.

For any consideration of Combination, a definition of that which is meant by the term becomes of first importance, and it is in the search for definitions that the differences in opinions relative to the term become most apparent.

On investigation, definitions for Combination are found to vary from that most limited and specific definition given by the Supreme Court decision in *Pickering vs. McCullough* to that definition which finds some acceptance and vogue in advanced practice and in which combination is set forth as "An inventive assemblage of parts." This definition, however, is better framed to include the many different adjudicated cases of combination than to afford aid for its specific application, as it supplies no determining factors and is much too broad to be of any practical assistance.

Turning, then, as we must, to the court decisions for definitions for Combination we find in decisions of the Supreme Court in the cases of *Hailes vs. Van Wormer*, *Rickendorfer vs. Faber*, and *Pickering vs. McCullough* the following statements of that which is combination:

In *Hailes vs. Van Wormer*, Mr. Justice Strong said:

All the devices of which the alleged combination is made is confessedly old. No claim is made for any one of them singly as an independent invention. It must be conceded that a new combination, if it produces new and useful results, is

patentable, though all the constituents of the combination were well known and in common use before the combination was made. But the results must be a product of the combination, and not a mere aggregate of several results each the complete product of one of the combined elements. Combined results are not necessarily a novel result, nor are they an old result obtained in a new and improved manner. Merely bringing old devices into juxtaposition, and then allowing each to work out its own effect without the production of something novel is not invention.

In *Rickendorfer vs. Faber*, Mr. Justice Hunt announced:

The combination to be patentable must produce a different force or effect or result in the combined forces or processes from that given by their separate parts. There must be a new result produced by their union; if not so, it is only an aggregation of separate elements.

In *Pickering vs. McCullough* combination is given its most specific definition in the statement:

In a patentable combination of old elements all the constituents must so enter into it as that each qualifies every other.

To draw an illustration from another branch of the law, they must be joint tenants of the domain of the invention, seized each of every part, *per my et per tout*, and not mere tenants in common, with separate interests and estates.

The combination must form either a new machine of a distinct character and function, or produce a result due to the joint and co-operating action of all the elements, and which is not the mere adding together of separate contributions. Otherwise it is only a mechanical juxtaposition, and not a vital union.

This last definition in *Pickering vs. McCullough* was found, however, entirely too limited and specific to per-

mit of general application, and the criticism taken from Walker on Patents is given:

"If, instead of an extract, the whole opinion be read, in connection with the authorities which are cited in it, it may be readily perceived that the substance of the doctrine intended to be affirmed is that a combination to be patentable must produce a new and useful result as the product of combination, and not a mere aggregate of several results, each the complete result of one of the combined elements." And that: "If it were essential to a valid patent for any combination whatever that the mode of operation of every element included in the combination should be changed by each of the others, it would have been impossible to sustain several combination patents which have in fact been upheld, as, indeed, it would be difficult to conceive of any mechanical combination which would be both possible and patentable."

As a summation of the accepted definitions of that which comprises a patentable combination, the following is quoted from paragraph 33 of Walker:

"To make a valid claim for a combination, it is not necessary that the several elementary parts of the combination should act simultaneously. If those elementary parts are so arranged that the successive action of each contributes to produce some one practical result, which result, when attained, is the product of the simultaneous or successive action of all the elementary parts, viewed as one entire whole, a valid claim for thus combining those elementary parts may be made."

In all of these definitions we find Combination determined and defined by result, and no generally employed definition of Combination can be discovered in which the production of a so-called single and unitary result is not required as a determining factor.

With Combination thus defined by result, the fact is most illuminative that on any attempt to illustrate by a

concrete application, an instance is selected presenting the idea of a chemical compound, taken either as a composition of matter or as a process or method for the production for the compound. Generally such an instance is selected as the production of vulcanized rubber by the Goodyear process. And here, considered either as a compound or as a method or process, we have an ideal and perfect illustration of Combination defined by result—an illustration which will answer even the most specific limitations of the full definition of Combination as stated in *Pickering vs. McCullough*, as the parts or elements, raw rubber and sulphur, enter into the combination so that each is seized as joint tenants of the entire domain of the invention; and the combination is easily found to produce a single, new and useful result, the vulcanized rubber.

But when we attempt to apply the definition of Combination to a machine, the application halts at result. What is the result of a machine? Is it the function or operation of the machine, or is it its product? And what is the difference, if any, between the function or operation of a unitary machine and that which we term its inherent law of action by which it is defined and distinguished as a unitary machine?

In *Webster Loom Co. vs. Higgins* the result is defined as the greatly increased effectiveness of the machine.

On attempting analysis, we find the words "increased effectiveness" to be distinctly relative, implying a reference to another construction and a change from the same, the increased effectiveness being a direct result of the change, but not the result of the co-operation or interaction of the parts or elements of the machine. The increased effectiveness may aid in the determination of invention, but can not be easily applied as a test as to whether or not the parts co-operate. If so applied as a test for co-operation to the claims of the *Richard's* patent, No. 308,905, the test of increased effectiveness could well be answered affirmatively, yet such claims in *Richards vs. Chase Elevator Co.*, 71 O. G., 1456, a Supreme Court decision, were held to be for a pure aggregation.

A yet greater difficulty in the determination of Combination by result is encountered in the application of

the term to a second class of machines, comprising associations and assemblages of devices or elements which do not possess the inherent law of action characterizing a unitary machine, and of which an illustration is afforded in the case of the *Burdett-Rowntree Mfg. Co. vs. Standard Plunger Elevator Co.*, cited in *Krell Auto Grand Piano Co. vs. Story and Clark*, 206 O. G., 316.

In this case the assemblage comprised an elevator car, an electric motor in the basement of the building, call bells, floor bells, and door signals, and in reference to which the court stated:

By the grouping and arrangement that are said to be merely aggregation, it seems plain that an intimately related whole has in fact been evolved, in which each part has been made more effective to accomplish the common object, and in which the increased efficiency is due to the new relation of each part to the others. The total result is certainly greatly improved in the several particulars already referred to; and, while it is not a tangible product that has been improved, the new method of operation produces a clearly perceptible advance in the art. Elevators with one point control arrangement of signals and motor are operated more rapidly, more easily, more safely, and more efficiently, and greatly improved operation seems to be a new and beneficial result produced by a new combination and arrangement of known elements.

Associations, assemblages, or agroupments of devices of the above class do not possess the law of action found in a unitary machine, but yet are termed machines that they may be held within the limits of the statutory classes for which patents may be granted; and to permit the application of the term Combination to this class of devices, the intervention of the operator has been brought in where necessary to secure co-operation of the elements to produce that result which has been termed the increased efficiency or the greatly improved operation of the assemblage.

In view of the difficulties thus encountered in the

application of the term Combination defined by result, it may be of interest to inquire whether there may not exist other paths to the allowance of claims for Combination than as defined in the production of a single and unitary result.

May we not consider the restriction of the term Combination by result only to claims for processes and for compositions of matter; the use of the term *Combination by Law of Action* for claims for unitary machines, which operate in proper relation and sequence, and the use of the term *Combination by Space Relation* for assemblages and associations of devices comprising the so-called machines of the second class, if thereby any clarification of thought as to the application of the term combination is to be obtained?

Clearly the more definite the rule, the more certain is the determination of the results of its application in any particular case. Hence, if by such definitions of Combination a more certain test is enabled in each particular application, certainly some warrant is to be found for the suggestion, and it only remains to be determined by actual test whether the application of the term Combination as above defined is of value.

In the practical application of such suggested combinations, claims for combinations by result would be considered, as now, by the result attained.

Claims for unitary machines or for pluralities of parts of the same, comprising Combinations by Law of Action, would be considered relative to the questions of novelty, utility and invention in the light of the law of action of the parts, and, if no new law of action should be developed, the fact would be evident that the parts or elements changed were but the mechanical equivalents of like parts in the anticipatory mechanism.

In claims for assemblages comprising Combinations by Space Relation, the novelty, utility and invention should be found in the change in the configuration or relative agroupment of the parts or elements to permit of their association and assemblage in the relation claimed.

A particular illustration of that relation intended by the phrase *Combination by Space Relation* is afforded by devices of that class or order comprehended by the term

Compound Tools. Devices of this class present associations of different tools or implements in which great ingenuity involving invention is displayed in making changes or modifications of one or both of the devices or implements to permit them to be brought together, yet the changes are entirely in form and are without any change in function or result.

The application of the test of Combination by result to compound tool construction is found in *Rickendorfer vs. Faber*, the well-known case of the application of a piece of rubber serving as an eraser to one end of a lead pencil; and the decision naturally found no Combination for the production of a result.

If viewed as a Combination by Space Relationship, the inquiry would have been directed to the determination of the degree of change in shape or adjustment of the parts to permit them to be associated, and the interaction of the two devices in co-operation to a novel and unitary result could have been disregarded.

As a clear concept of the conditions for the application of the term Combination is so essential in the practice of this office for the proper determination of patentability and for the analysis of claims, any attempt to throw additional light on the subject may be of value. This paper is therefore submitted in the hope that at least the matter may be opened to discussion and the expression of other thoughts thereon.

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It would be a combination by space relationship if the inquiry would have been directed to the determination of the degree of change in shape or adjustment of the parts to permit them to be associated and the interaction of the two devices in cooperation to a novel and unitary result would have been disregarded.

A clear concept of the conditions for the application of the term combination is essential in the practice of this office for the proper determination of patentability and for the analysis of claims, any attempt to throw additional light on the subject may be of value. This paper is therefore submitted in the hope that at least the matter may be opened to discussion and the expression of other thoughts thereon.

